

# What next, after 2017?

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# Cold Start+++

- Events
    - Macro-event and nuggets
    - REALIS
    - Coref
    - Event sequencing
  - Entities
    - Detection
    - Linking (= full coref)
    - NIL clustering
  - Sentiments and Beliefs
    - Opinion judgments
    - Beliefs
  - Relations
  - Sources
    - Single-document
    - Separate languages
- Events
    - Many more event types
    - Scripts (detection, filling, inference, roles, goals)
    - Plan detection
  - Entities
    - Many more semantic types
    - Entity groups and quasi-coref
    - Rich property descriptions
  - Sentiments and Beliefs
    - Certainty judgments
  - Relations etc.
    - More...many more relations?
    - Tables
    - Figures and images
  - Sources
    - Cross-document
    - Cross-language
    - New domains: from news to biomed, business
    - Other (low-density) languages

# Topics from panel members

- **Entities and Events:**
  - Cross-event linking (subevent coref, temporal-after links, scripts, etc.)
  - Rich entity description (many properties)
  - Role assignment: entity-to-event linking
  - Relations: procedure for the long tail of relations
  - Entity and event types: More, and finer-grained
- **Other types of info:**
  - Sentiment, emotion, beliefs
  - Goals, plans, intentions, other cognitive states
  - Dialogue states
  - Cultural states
- **KB:**
  - KB assertions tagged with meaningful confidence/certainty measures
  - Multiple / n-best hypotheses at all levels, from individual assertions to subgraphs
  - Knowledge / feature transfer across NL tasks
- **Sources:**
  - Multilingual event and entity detection, using existing types
  - Multimedia (text + X): event and entity detection, relations
  - Data: structured and unstructured
  - Streaming mode
- **Applications:**
  - Current applications for KBP technology
  - What applications in 3–5 years, if there were a future program after DEFT
- **Methodology:**
  - Should we focus on improving recognition and linking performance on the current (rather narrow) event and entity types?
  - Should we try to go for many more (or open) semantic types?
  - Should we focus on building resources (accelerating annotation, etc.)?

# Panelist comments

- Ralph:
  - Update/change detection in streaming media
  - But already today there is a market for crummy IE
- Bonnie:
  - Intentionality, via sentiment and socio-cultural detection
- Boyan:
  - Confidence scores; streaming media; integration across genres
- Heng:
  - Ambitious 300 languages and multimedia input, to build a KB for life